Pending Claims:

The claims have not been amended. The listing of claims is provided herewith for convenience and ease of prosecution.

Listing of Claims:

1. (original) A system comprising

first and second wireless optical system transceivers to exchange customer traffic via a primary channel comprising a wireless optical system link;

first and second network devices coupled to the first and second wireless optical system transceivers, respectively, to selectively route the customer traffic via the primary channel or via an alternate channel; and

first and second link quality agents, coupled to the first and second wireless optical system transceivers, respectively, and coupled to the first and second network devices, respectively, to monitor an optical signal quality of the wireless optical system link and to control the first and second network devices to route the customer traffic to the alternate channel and to route test traffic to the wireless optical system link when the optical signal quality of the wireless optical system link is determined by at least one of the first and second link quality agents to have entered a marginal state.

2. (original) The system of claim 1, the first and second link quality agents further to reroute the customer traffic back to the wireless optical system link via control of the first and second network devices when it is determined by at least one of the first and second agents

that the optical signal quality of the wireless optical system link has returned to a non-marginal state.

3. (original) The system of claim 1, wherein the first and second link quality agents monitor an analog quality of the wireless optical system link.

4. (original) The system of claim 1, wherein the first and second link quality agents monitor a digital quality of the wireless optical system link.

5. (original) The system of claim 1, wherein the alternate channel routes traffic via a computer network coupled between the first and second network devices.

6. (original) The system of claim 1, wherein the alternate channel employs a different transport medium than the wireless optical system link.

7. (original) A method, comprising:

initiating a link quality agent;

transmitting customer data between first and second wireless optical system transceivers over a primary channel comprising a wireless optical system link;

monitoring an optical signal quality of the wireless optical system link via the link quality agent; and

rerouting the customer data to an alternate channel and transmitting test data over the wireless optical system link if the link quality agent determines the quality of the wireless optical system link is marginal,

wherein said wireless optical system link and the alternate channel route the customer data along different transport mediums.

8. (original) The method of claim 7, wherein the optical signal quality of the wireless optical system link is determined to have entered a marginal state by determining a received analog signal strength is below a threshold value.

9. (original) The method of claim 7, wherein the optical signal quality of the wireless optical system link is determined to have entered a marginal state by determining that a received packet error count is above a threshold value.

10. (original) The method of claim 7, wherein the optical signal quality of the wireless optical system link to have entered a marginal state by determining that a ratio of packet errors to a number of packets received is above a threshold value when computed over a parameterized number of samples.

11. (original) The method of claim 7, wherein the optical signal quality of the wireless optical system link is determined to have entered a marginal state by determining that a ratio of packet errors to a number of packets received is above a threshold value and

that a received analog signal strength is below a threshold value when computed over a parameterized number of samples.

12. (original) The method of claim 7, further comprising rerouting the customer data to be transmitted over the wireless optical system link and discontinuing transmission of the test data over the wireless optical system link when it is determined by the link quality agent that the optical signal quality of the wireless optical system link has returned to a non-marginal state.

13. (original) The method of claim 12, wherein rerouting the customer data from the wireless optical system link to the alternate channel and rerouting the customer data back to the wireless optical system link comprise respective switchover conditions, further comprising implementing a configurable delay between when the quality of the link is determined to have changed between marginal and non-marginal states and when an associated changeover condition occurs to prevent network flapping.

14. (original) The method of claim 7, wherein the quality of the wireless optical system link is determined to have entered a marginal state by determining that both an analog quality of the link and a digital quality of the link have fallen below a threshold level of performance.

15. (original) The method of claim 7, wherein the wireless optical system link employs a first transport medium and the alternate channel employs a second transport medium different from the first transport medium.

16. (original) A machine-readable medium having machine-readable instructions stored thereon, which when executed cause a machine to perform the operations of:

initiating a link quality agent;

transmitting customer data between first and second wireless optical system transceivers over a primary channel comprising a wireless optical system link;

monitoring an optical signal quality of the wireless optical system link via the link quality agent; and

rerouting the customer data to an alternate channel and transmitting test data over the wireless optical system link if the link quality agent determines the optical signal quality of the link is marginal, wherein said wireless optical system link and the alternate channel route the customer data along different transport mediums.

17. (original) The machine-readable medium of claim 16, wherein execution of the machine instructions further performs the operation of monitoring a detector output to determine if a received analog signal strength is below a threshold value, whereby the optical signal quality of the link is determined to have entered a marginal state.

18. (original) The machine-readable medium of claim 16, wherein execution of the machine instructions determines that the optical signal quality of the link has entered a

marginal state by performing the operation of determining that a received packet error count is above a threshold value.

19. (original) The machine-readable medium of claim 16, wherein execution of the machine instructions further performs the operations of determining if the optical signal quality of the wireless optical system link has returned to a non-marginal state, and in response thereto rerouting the customer data to be transmitted over the wireless optical system link and discontinuing transmission of the test data over the wireless optical system link.

20. (original) The machine-readable medium of claim 16, wherein rerouting the customer data from the wireless optical system link to the alternate channel and rerouting the customer data back to the wireless optical system link comprise respective switchover conditions, and wherein execution of the machine instructions further performs the operation of implementing a configurable delay between when the quality of the link is determined to have changed between marginal and non-marginal states and when an associated changeover condition occurs to prevent network flapping.

21. (original) The machine-readable medium of claim 16, wherein the wireless optical system link employs a first transport medium and the alternate channel employs a second transport medium different from the first transport medium.

22. (original) A method for sending customer data from a first location to a second location, comprising:

(a)   providing a primary channel comprising a wireless optical system link enabled by respective wireless optical system transceivers disposed at the first and second locations;

(b)   providing access to a backup channel comprising a network connection between the first and second locations;

(c)   routing customer data over the primary channel while monitoring an optical signal quality of the wireless optical system link to determine if the link enters a marginal operating state, and in response thereto,

(d)   rerouting the customer data over the backup channel; and

(e)   sending test data over the wireless optical system link while monitoring the optical signal quality to determine if the link returns to a non-marginal operating state, and in response thereto,

(f)   rerouting the customer data back to the primary channel; and

(g)   repeating operations (c)-(f) on a continuous basis.

23. (original) The method of claim 22, wherein rerouting the customer data from the primary channel to the backup channel and rerouting the customer data back to the primary channel comprise respective switchover conditions, the method further comprising implementing a configurable delay between when the link quality is determined to have changed between marginal and non-marginal states and when an associated changeover condition occurs to prevent network flapping.